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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,847	06/27/2003	Brian Kivisto	1768.13US02	8733

24113 7590 10/18/2004

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EXAMINER

VAN, QUANG T

ART UNIT	PAPER NUMBER
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3742

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/608,847

Applicant(s)

KIVISTO, BRIAN

Examiner

Quang T Van

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 1-5 and 13-16 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-12 and 17-22 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/23/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

QUAYLE ACTION

This application is in condition for allowance except for the following formal matters:

Election/Restrictions

1. Applicant's election without traverse of Species V (Figure 9, claims 6-12, 17, and 19-22) in the reply filed on 8/16/2004 is acknowledged. In response to the applicant's notes that "some of these claims are generic to one or more of the non-elected Species. For example, claim 6 is readable on Species V and is also readable on Species II and Species III. Claim 17 is readable on Species V and is also readable on Species III. Claim 21 is readable on Species V and also readable on Species II and III. Claim 22 is readable on Species V and also readable on Species I, II, III and IV". The Examiner disagrees. A generic claim is a claim which is readable on all Species. Therefore, only claim 22 is a generic claim.

Since the claims read on Species V in condition for allowance, claims 6-12, 17-22 are allowed, claims 1-5 and 13-16 will be cancelled when the application is in allowable condition.

Drawings

2. The drawings are objected to because a reference "6", recited in Figure 1, should be changed to "26" for consistent with the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if

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only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The abstract of the disclosure is objected to because the legal phraseology such as "comprises" often used in patent claims should be avoided in the abstract.

Correction is required. See MPEP § 608.01(b).

Allowable Subject Matter

4. Claims 6-12 and 17-22 are allowed.
5. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not show or suggest in combination the steps of providing a first hardness testing device to a forward side of an induction hardening head, moving the induction hardening head over the workpiece to induction harden the workpiece, taking a plurality of forward hardness measurements of the workpiece with

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the first hardness testing device, and adjusting the induction hardening head to provide a predetermined hardness profile to the workpiece as recited in claims 6-12 and 21; an induction hardening assembly slidably connected to a base, a first hardness measuring device disposed on a forward side of induction hardening assembly; and a second hardness measuring device disposed on a following side of the induction hardening assembly as recited in claims 17-20; and means for induction hardening assembly edge of the workpiece, first means provided to the apparatus for measuring the hardness of the workpiece, and second means provided to the apparatus for measuring the hardness of the workpiece as recited in claim 22.

NOTE: Since claim 22 uses means plus function format, it gives rise to the interpretation under 35 USC 112, par. 6 in light of and consistent with the written description of the invention in the application.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Iguchi et al (US 6,270,596) discloses a process for producing high strength shaft. Seyfried et al (US 3,648,995) discloses an apparatus for inductively heating an elongated workpiece. Kerr (US 4,321,097) discloses a blade fabrication

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process. Cozar et al (US 6,605,163) discloses a process for manufacturing a strip made of an Fe-Ni alloy.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang T Van whose telephone number is 703-306-9162. The examiner can normally be reached on 8:00Am 7:00Pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 703-305-5766. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

QV

QV

October 8, 2004



Quang T Van
Primary Examiner
Art Unit 3742